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| 09/933,839 | 08/22/2001 | Noboru Yanagida | 213024US0 | 7276 |
| 22850 | 7590 | 06/09/2004 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | REDDICK, MARIE L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1713 | |
| DATE MAILED: 06/09/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,839

Applicant(s)

YANAGIDA, NOBORU

Examiner

Judy M. Reddick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 & 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. It is urged and maintained that newly submitted claims 11-20(presented 08/19/03) are directed to an invention that is independent or distinct from the invention as originally claimed for the following reasons: The invention(claims 1-10, now 1-3, 6 & 8-10), as originally presented, is drawn to a method for producing a saponified ethylene-vinyl acetate copolymer. The newly presented claims(11-20) are drawn to a method of manufacturing a film, sheet, package and/or laminate comprising saponified ethylene-vinyl acetate copolymer. The inventions are separate and distinct, each from the other, as per such being related as mutually exclusive species, each not requiring the particulars of the other for patentability. The product resulting from the method of claims 1-3, 6 & 8-10 is substantially, structurally different from the product resulting from the method of claims 11-20. As to the argument presented by Counsel, i.e., "there is no undue burden to include these claims, which are dependent on the elected claims"(03/23/04,page 5 of REMARKS/ARGUMENTS, lines 1-5), the search required for the newly presented claims(11-20) is not required for the claims of the elected invention(1-10, now 1-3, 6 & 8-10). Furthermore, Counsel has not pointed out how the reasons advanced by the Examiner, for holding that the inventions are separate and distinct, are in error.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-20 stand withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. The restriction is proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a

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whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6 & 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart et al(U.S. 4,377,621) in combination with Hoyt et al(U.S. 3,985,719) and further in combination with Moritani et al(U.S. 5,744,547) or Moritani et al(U.S. 6,288,165 B1) or Takahashi(U.S. 4,611,029).

As to claims 1-3, 6 & 8-10, Hart et al teach (1) a method for producing a saponified ethylene-vinyl acetate copolymer, which comprises saponifying an ethylene-vinyl acetate copolymer in an alcohol-based solvent in the presence of an alkali catalyst(col. 3, lines 1-19 & 62-68 & col. 4, lines 18-46), wherein from 100 ppm to 15,000 ppm of water(based on the ethylene-vinyl acetate copolymer) is added to the alcohol-based solvent(col. 3, lines 8-10 & col. 5, lines 13-18); (6)/(1) wherein from 100 ppm to 3000 ppm water(based on the ethylene-vinyl acetate copolymer) is added to the alcohol-based solvent(col. 5, lines 13-18); (8)/(1) wherein the ethylene content in the ethylene-vinyl acetate copolymer is from 20 to 70 mol %(col. 6, lines 15-36); (9)/(1) wherein the alcohol in the alcohol-based solvent is one or more selected from the group consisting of methanol, ethanol, n-butanol and t-butanol(col. 3, lines 62-68); (10)/(1) wherein the alkali catalyst is selected from the group consisting of sodium hydroxide, potassium hydroxide, and an alkaline metal alcoholate(col. 4, lines 25-27). Further, the disclosure of Hart et al differs basically from the claimed invention as per a) the non-express disclosure of an embodiment directed to carrying out saponification of an ethylene-vinyl acetate copolymer until its saponification degree is at least 98 mol %(1), (b) the non-express disclosure of an embodiment directed to (2)/(1) a method wherein a first solution comprising an ethylene-vinyl acetate copolymer and an alcohol-based solvent and a second solution comprising an alkali catalyst and an alcohol-based solvent are introduced into a saponification reaction column through an upper portion thereof, and a vapor of an alcohol-based solvent is introduced in the saponification reaction column through a lower portion thereof; c) (3)/(2) wherein the water is fed into the saponification column with the second solution; As to (1), it would have been obvious to the skilled artisan to adjust the degree

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of saponification/hydrolysis of the ethylene/vinyl acetate copolymer of Hart et al via adjusting process parameters such as water content, alcohol content, catalyst content, reaction time, etc. as suggested by Hart et al(col. 3, lines 26-38 and col. 5, lines 22-47) and evidenced by Hoyt et al(col. 5, lines 34-62 & the paragraph bridging cols. 8-9), incorporated by reference(cols. 2 & 3 of Hart et al), and with a reasonable expectation of success and with the understanding that "suitable" is relative and not absolute. Criticality for such, clearly commensurate in scope with the claims, not having been demonstrated on this record. As to (2)/(1) & (3)/(2), the mechanics of carrying out saponification of an ethylene-vinyl acetate copolymer via the use of a saponification reaction column is conventional as evidenced by Moritani et al'547(see the Runs) or Moritani et al'167(see the Runs) or Takahashi(see the Runs) therefore, it would have been obvious to the skilled artisan to use the conventional saponification reaction column in the process of Hart et al for producing similar such ethylene/vinyl acetate copolymers and with a reasonable expectation of success. Criticality for such, not having been demonstrated on this record.

Response to Arguments

4. Applicant's arguments filed 03/23/04 have been fully considered but they are not persuasive.

Relative to Hart et al w/Hoyt et al and further w/Moritani et al'547, Moritani et al'165 or Takahashi---It is urged and maintained that the instantly claimed invention is obvious within the meaning of 35 USC 103(a) over the prior art supra as per reasons clearly stated in the Grounds of rejection supra.

The crux of Counsel's arguments appear to hinge on the failure of Hart et al to teach a degree of hydrolysis of the ethylene-vinyl acetate copolymer in excess of 75 mol. %. Counsel, is herein reminded that a reference is evaluated, as a whole, for what it fairly teaches and is in noway limited to bits and pieces. To this end, Hart et al @ col. 2, lines 30+ teach, basically, that the HEVA(saponified/hydrolyzed ethylene-vinyl acetate copolymers) are produced in accordance to the teachings of U.S. 3,985,719, Hoyt et al) and, as evidenced by Hoyt et al, ethylene-vinyl acetate copolymers having a degree of

saponification/hydrolysis as high as 99 mol% in combination with water contents between 100 and 3400 ppm are operable within the scope of patentees invention(col. 9, lines 41-55). Therefore, it would have been obvious to the skilled artisan to modify the degree of saponification/hydrolysis of the ethylene-vinyl acetate copolymer of Hart et al, following the guidelines of Hoyt et al and with a reasonable expectation of success. Even if this turns out not to be the case, it is urged and maintained that it would have been obvious to the skilled artisan to adjust the degree of saponification/hydrolysis of the ethylene/vinyl acetate copolymer of Hart et al via adjusting process parameters such as water content, alcohol content, catalyst content, reaction time, etc. as suggested by Hart et al(col. 3, lines 26-38 and col. 5, lines 22-47) and evidenced by Hoyt et al(col. 5, lines 34-62 & the paragraph bridging cols. 8-9), incorporated by reference(cols. 2 & 3 of Hart et al), and with a reasonable expectation of success and with the understanding that "suitable" is relative and not absolute. Moritani et al and Takahashi et al are relied upon to show that the mechanics of carrying out saponification/hydrolysis of an ethylene-vinyl acetate copolymer via the use of a saponification reaction column is conventional. It is well established that a reference is available for all it teaches including nonpreferred embodiments as for instance is discussed in M.P.E.P. § 2123 which is quoted in its entirety below (underlinings added).

2123 Rejection Over Prior Art's Broad Disclosure Instead of Preferred Embodiments

PATENTS ARE RELEVANT AS PRIOR ART FOR ALL THEY CONTAIN

"The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) (The court held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modem with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed.").

NONPREFERRED EMBODIMENTS CONSTITUTE PRIOR ART

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (The invention was directed to an epoxy impregnated fiber-reinforced printed circuit material. The applied prior art reference taught a printed circuit material similar to that of the claims but impregnated with polyester-imide resin instead of epoxy. The reference, however, disclosed that epoxy was known for this use, but that epoxy impregnated circuit boards have "relatively acceptable dimensional stability" and "some degree of flexibility," but are inferior to circuit boards impregnated with polyester-imide resins. The court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132.).

Counsel is herein apprised that a rejection, in the future, based on Hoyt et al (U.S. 3,985,719), alone (as applied to at least claim 1), may be made since Hoyt et al appears to teach all of the limitations of at least claim 1. However, since an outstanding rejection exists on this record, this rejection is not being made at this time.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

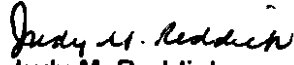
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR 
06/04/04